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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,093	12/23/1999	TREVOR D. CORKUM	71493-629	6993

7380 7590 03/14/2003

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CANADA

EXAMINER

WAITE, SCOTT A

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/471,093	CORKUM ET AL.	
	Examiner	Art Unit	
	Scott A. Waite	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 1999.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-26 and 28-48 is/are rejected.
- 7) ☒ Claim(s) 11 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 – 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear from claim 4-6 what the order of operations is.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 8, 12 -16, 18 – 22, 24, 28 –39 & 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al. (USPN 6,222,848 B1) in view of Narasimba et al. (USPN 5,828,670).

- a. As to claims 1 - 3, 8, 12 -16, 18, 19, 31-33, 40 - 43, 46 & 48 in Fig. 2, Hayward discloses a method of transmitting LAN data 116, 117, 120, & 126 across an optical network 102, 104, 106 & 108 but fails to explicitly point out allocating in each frame one or more bytes of overhead data to carry LAN data; however, Hayward does point out that it is known that it is desirable to transmit

Ethernet LAN data to another LAN via SONET and that current SONET networks are poorly designed to efficiently carry such data traffic. See Col. 3, lines 30 – 55. Narasimba discloses that SONET has an F1 byte or “optical channel” in overhead that is unused and may be used for transmitting information. Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions of Hayward and Narasimba so that Ethernet LAN data is transmitted in the F1 byte of the SONET overhead when motivated to create a more efficient SONET transmission system.

b. As to claim 4, in Fig. 2, Hayward discloses a packet source/sink 118. The claimed LAN data generation reads on the packet source /sink.

c. As to claims 5,36 & 45 in Fig. 3 Hayward discloses a buffer 248 between Ethernet data 216 and SONET data 206. The claimed received LAN data and buffer read on Ethernet data 216 and buffer 248.

d. As to claims 6 & 7, in Fig. 3, Hayward discloses a transport node for receiving STS channels 256 and then extracting LAN data 220 and sending it to another LAN device.

e. As to claims 20 - 22, 34, 35,37 - 39, 44 & 47 in Fig. 2 & 3, Hayward discloses an Ethernet LAN 120 with a packet distributor 214, scheduler 236 and encapsulator 237, scheduler 228 and SONET packet transmitter 258. The claimed LAN hub, CPU, overhead interface, optical transmitter and receiver read

on the Ethernet LAN 120, packet distributor 214, scheduler 228 and channel add/drop 258 and channel add/drop 202 respectively.

3. Claims 9,10,17,23,25 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al. (USPN 6,222,848 B1) in view of Narasimba et al. (USPN 5,828,670) as applied to claims 1 - 8,12 -16,18 – 22, 24,28 –39 & 41-48 above, and further in view of Pierson, Jr. (USPN 6,195,346). Official notice is taken that both the concept and the advantages of providing for STS-192 frames are well known and expected in the art. Hayward and Narasimba disclose all the features of claims 9 & 10 & 17, 23, 25, 26 except for a subset of STS-192 frames that are scalable. Official notice is taken that both the concept and the advantages of providing for STS-192 frames are well known and expected in the art. Pierson teaches the scaling of STS-I frames to meet higher transmission needs. See col. 10, line 61 – col. 11, line7. Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the STS-192 frame between LAN's in order to handle the desired data rates and furthermore to provide scalability when motivated to provide greater transmission speeds.

***Allowable Subject Matter***

4. Claims 11& 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2663

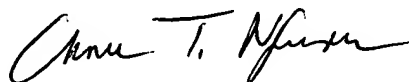
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A. Waite whose telephone number is 703-305-7869. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 308-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Scott A. Waite  
Examiner  
Art Unit 2663

saw *sh*  
March 10, 2003



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600